AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-2. (canceled)

3. (currently amended) A production method of encapsulating-fullerene or encapsulating-nanotube material film in a cylindrical vacuum vessel having in one side a plasma generation means from which plasma is generated and having in another side a deposition assistance substrate on which material film are formed, the method comprises:

generating said plasma including encapsulation target ions and collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules or nanotube molecules and having the same polarity as said encapsulation target ions;

irradiating said plasma toward said deposition-assistance substrate on which fullerene or nanotube are deposited, by applying a bias voltage of a polarity opposite to that of said encapsulation target ions to said deposition-assistance substrate, to thereby provide said encapsulation target ions and said collision ions with acceleration energies, respectively; and

colliding said collision ions with said fullerene molecules or nanotube molecules, to deform said cyclic rings and thereby cause said fullerene molecules or nanotube molecules to encapsulate said encapsulation target ions, respectively.

4. (previously presented) The production method of claim 3, further comprising:

depositing said fullerene molecules or nanotube molecules on said deposition-assistance substrate, simultaneously with the irradiation of said plasma toward said deposition-assistance substrate.

5. (previously presented) The production method of claim 3, further comprising:

irradiating said plasma onto said fullerene molecules or nanotube molecules previously deposited on said deposition-assistance substrate.

6. (currently amended) A production method of encapsulating-fullerene or encapsulating-nanotube material film in a cylindrical vacuum vessel having in one side a plasma generation means from which plasma is generated and having in another side a deposition-assistance substrate on which material film are formed, the method comprising:

generating said plasma including collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules or nanotube molecules;

irradiating said plasma toward fullerene or nanotube previously deposited on said deposition-assistance substrate;

simultaneously therewith, shooting vapor comprising encapsulation target molecules toward said fullerene or nanotube;

colliding said collision ions with said fullerene molecules or nanotube molecules, to deform said cyclic rings and thereby cause fullerene molecules or nanotube molecules to encapsulate said encapsulation target molecules.

7. (previously presented) The production method of claim 6, further comprising:

transporting said generated plasma by a magnetic field to thereby irradiate said plasma toward said deposition-assistance substrate.

8. (canceled)

9. (previously presented) The production method of claim 3, wherein said encapsulation target ions are alkali metal ions, nitrogen ions, or halogen ions.

10. (previously presented) The production method of claim 6, wherein said encapsulation target molecules are TTF, TDAE, TMTSF, pentacene, tetracene, anthracene, TCNQ, Alq_3, or F_4TCNQ.

11. (previously presented) The production method of claim 3, wherein said collision ions each have a diameter of 3.0 Å or larger.

12. (previously presented) The production method of claim 11, wherein said collision ions are fullerene positive ions or fullerene negative ions, respectively.

13. (currently amended) A production apparatus of encapsulating-fullerene or encapsulating-nanotube material film, comprising:

a cylindrical vacuum vessel in which said encapsulating-fullerene or encapsulating-nanotube material film is produced;

plasma generation means in one side of said vacuum vessel for generating plasma including encapsulation target ions and collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules or nanotubes molecules and having the same polarity as said encapsulation target ions;

a deposition-assistance substrate on which material film are formed, said deposition assistance substrate is in another side of said vacuum vessel, fullerene or nanotube are deposited on said deposition-assistance substrate;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate.

14. (previously presented) The production apparatus of claim 13, wherein said electric potential body comprises electroconductive wires in a lattice pattern.

15. (currently amended) A production apparatus of encapsulating-fullerene or encapsulating-nanotube material film, comprising:

a cylindrical vacuum vessel in which said encapsulating-fullerene or encapsulating-nanotube material film is produced;

plasma generation means in one side of said vacuum vessel for generating plasma including encapsulation target ions;

collision ion generation means for generating collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules or nanotubes molecules;

a deposition-assistance substrate on which material film are formed, said deposition assistance substrate is in another side of said vacuum vessel, fullerene or nanotube are deposited on said deposition-assistance substrate;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate.

16. (currently amended) A production apparatus of encapsulating-fullerene or encapsulating-nanotube material film, comprising:

a cylindrical vacuum vessel in which said encapsulating-fullerene or encapsulating-nanotube material film is produced;

plasma generation means in one side of said vacuum vessel for generating plasma including collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules or nanotubes molecules;

a deposition-assistance substrate on which material film are formed, said deposition assistance substrate is in another side of said vacuum vessel, fullerene or nanotube are deposited on said deposition-assistance substrate;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate;

encapsulation target molecule shooting means for shooting vapor including encapsulation target molecules to said deposition-assistance substrate; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate.

17. (previously presented) The production method of claim 3, further comprising:

measuring an electric current flowing between the deposition-assistance substrate and a bias power supply for

applying the bias voltage thereto, to thereby measure the density of the encapsulation target ions.

18. (currently amended) A production method of encapsulating-fullerene material film in a cylindrical vacuum vessel having in one side a plasma generation means from which plasma is generated and having in another side a deposition-assistance substrate on which material film are formed, the method comprises:

generating said plasma including encapsulation target ions and collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules and having the same polarity as said encapsulation target ions;

irradiating said plasma toward said deposition-assistance substrate on which fullerene are deposited, by applying a bias voltage of a polarity opposite to that of said encapsulation target ions to said deposition-assistance substrate, to thereby provide said encapsulation target ions and said collision ions with acceleration energies, respectively; and

colliding said collision ions with said fullerene molecules, to deform said cyclic rings and thereby cause said fullerene molecules to encapsulate said encapsulation target ions, respectively.

19. (currently amended) A production method of encapsulating-fullerene material film in a cylindrical vacuum

vessel having in one side a plasma generation means from which plasma is generated and having in another side a deposition-assistance substrate on which material film are formed, the method comprising:

generating plasma including collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules;

irradiating said plasma toward fullerene previously deposited on said deposition-assistance substrate;

simultaneously therewith, shooting vapor comprising encapsulation target molecules toward said fullerene;

colliding said collision ions with said fullerene molecules, to deform said cyclic rings and thereby cause fullerene molecules to encapsulate said encapsulation target molecules.

20. (currently amended) A production apparatus of encapsulating-fullerene material film, comprising:

a cylindrical vacuum vessel in which encapsulating-fullerene material film is produced;

a plasma generation means in one side of said vacuum vessel from which plasma is generated;

a deposition-assistance substrate in another side of said vacuum vessel, material film are formed on said deposition-assistance substrate;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate;

an electric potential body configured to control a density of ions in said plasma by applying a control voltage to said electric potential body; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate,

wherein said plasma generation means generates a plasma including encapsulation target ions and collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules and having the same polarity as said encapsulation target ions, and fullerene are deposited on said deposition-assistance substrate.

21. (currently amended) A production apparatus of encapsulating-fullerene material, comprising:

a cylindrical vacuum vessel in which encapsulating-fullerene material film is produced;

a plasma generation means in one side of said vacuum vessel from which plasma is generated;

a deposition-assistance substrate in another side of said vacuum vessel, material film are formed on said deposition-assistance substrate;

collision ion generation means for generating collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate,

wherein said plasma generation means generates a plasma including encapsulation target ions, and fullerene are deposited on said deposition-assistance substrate.

22. (currently amended) A production apparatus of encapsulating-fullerene material film, comprising:

a cylindrical vacuum vessel in which encapsulating-fullerene material film is produced;

a plasma generation means in one side of said vacuum vessel from which plasma is generated;

a deposition-assistance substrate in another side of said vacuum vessel, material film are formed on said deposition-assistance substrate;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate;

encapsulation target molecule shooting means for shooting vapor including encapsulation target molecules to said deposition-assistance substrate; and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate[[.]],

wherein said plasma generation means generates a plasma including collision ions, said collision ions having diameters that are larger than diameters of cyclic rings of fullerene molecules, and fullerene are deposited on said deposition-assistance substrate.